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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,551	11/11/2003	Thor J. Johannsen	35683.0new	5092
26712	7590	09/23/2005	EXAMINER	
HODGSON RUSS LLP ONE M & T PLAZA SUITE 2000 BUFFALO, NY 14203-2391			MATTHEWS, TERRELL HOWARD	
			ART UNIT	PAPER NUMBER
			3654	

DATE MAILED: 09/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/705,551

Applicant(s)

JOHANNSEN, THOR J.

Examiner

Terrell H. Matthews

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-9, 11-16, 18 and 24-27 is/are rejected.
- 7) ☒ Claim(s) 4, 5, 10, 17, 19-23, 28 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/11/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claims 1-28 are pending in the instant application.

Information Disclosure Statement

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1-3,12,24-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Buckbee (2322415).

Referring to claim 1,24-26. Buckbee discloses a "Sand Dewatering Wheel" as disclosed. See Figs. 1-4 and respective portions of the specification. Buckbee further discloses a circular body plate (10), hub (11), shaft (12), tank (14), buckets (15), feed spout (24), outlet pipe (30), discharge openings (31), discharge notches (32), hoppers (33), and discharge spout (34). Buckbee further discloses the tank receives a liquid-solid mixture (See Col. 2 l. 40-43) and a first wheel mounted within the tank to rotate

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about a first wheel axis tilted at an angle relative to a horizontal reference with a plurality of spaced apart scoops for scooping up solid material and discharging the material outside the tank during rotation (See Col. 9-15, 43-46). Buckbee discloses that the fluid pass out through outlet pipe (30) and an angularly mounted discharge chute (33) attached to the tilt sidewall. (See Col 3 l. 1-5 & Col. 3 l. 55-63).

Referring to claim 2-3. Buckbee discloses a sidewall located adjacent to and conforming to a downwardly oriented first side of the first wheel for impeding scooped solid material from discharging from the scoops while rotating inside the first tank, the side wall having an upper edge portion over which the scoops discharge scooped solid material from the first side of the first wheel when rotated higher than the upper edge portion (See Col. 3 l. 35-39 & Fig. 2). Additionally, Buckbee discloses that each of the hoppers (33) is provided with a discharge spout (34) that passes through one of the sidewalls of the tank (14) to receive the solid material so that it does not fall back into the tank (See Col 3. l. 55-63). It is understood from Fig. 1-2 that the sidewall is substantially planar and substantially perpendicular to the first wheel axis.

Referring to claim 12. Buckbee further discloses buckets (15) that may be adjustably supported on their respective bolts (16), which are capable of angular adjustment. Additionally, Buckbee discloses that bolts (16) are tied together by links (19) which extend from bolt to bolt throughout the entire series of buckets and that the links are provided with a holding bolt (23) that locks into the terminal plate (21 which holds the buckets (15) in position. It is broadly construed and generally understood that

the buckets are connected together and that they are removable from the wheel by detaching holding bolt (23).

Referring to claim 27. With respect to claim 27, the method described in these claims would inherently result from the use of the "Sand Dewatering Wheel" as advanced above by Buckbee.

Claims 1,6-9,13-16,18, 24-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanii (5490928).

Referring to claims 1. Tanii discloses a "Tandem Waterwheel Trommel" as claimed. See Figs. 1-4 and respective portions of the specification. Tanii discloses a drain-off tank (1), connection pipe (2), classifying tank (3), base (5), roller (6), drive unit (10), buckets (14), gutters (16), drain holes (17), fixed shoot (19), sludge shoot (20), channel (29), scoop-up buckets (30), discharge ports (32,35), and screws (33,34). Tanii further discloses that the tank (1) receives a liquid-solid mixture (See Col. 4 l. 1-36). It is broadly construed and understood from Figs. 2 & 3 that the scooped up solid material from the first tank is discharged outside of the first tank during rotation of the first wheel.

Referring to claims 6-8. It is understood from Fig. 3 that the first wheel includes an inner hub from which scoops extend radially, the scoops each including a scoop wall terminating in an outer scoop edge with the scoop walls being open sided at the first side of the wheel, that the outer scoop edges of some of the scoop walls are parallel to the wheel axis, and that some of the outer scoop edges are angled relative to the wheel axis.

Referring to claim 9. Tanii discloses that water flows out of the drain hole (17) in an overflowing manner by the effect of a basin, which is defined by a difference in level between the bottom surface of the gutter (16) and the drain hole (17). It is understood from Fig. 3 that some of the scoop edges are angled to be parallel to the predetermined fill level for the mixture in the tank.

Referring to claim 13-15. It is understood from Fig. 3 that the some of the scoops define a concave region, which opens in the direction of rotation of the wheel and that some of the scoops define a cavity or hollow, which opens in the direction of rotation of the wheel and that the bottom wall is adjacent to a lower end of the wheel.

Referring to claim 16,18. Tanii discloses a second tank (3) for receiving some of the liquid-solid mixture from the first tank and a second wheel to rotate about an axis tilted at an angle including a plurality of spaced apart radially extending scoops about a periphery for scooping up solid material from within the second tank and subsequently discharging the scooped solid material outside of the second tank. It should be understood that both wheels could be tilted at an angle of zero degrees.

Referring to claims 24-26. Tanii discloses a drain-off tank (1), connection pipe (2), classifying tank (3), base (5), roller (6), drive unit (10), buckets (14), gutters (16), drain holes (17), fixed shoot (19), sludge shoot (20), channel (29), scoop-up buckets (30), discharge ports (32,35), screws (33,34). Trommel further discloses that the tank (1) receives a liquid-solid mixture (See Col. 4 l. 1-36 & Fig. 1).

Referring to claims 27. With respect to claim 27, the method described in these claims would inherently result from the use of Tanii's "Tandem Waterwheel Trommel" as advanced above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tanii.

Referring to claim 11. Tanni discloses the invention as described above. Tanni does not disclose that some of the scoops have a width greater than that of the cylindrical wall. It would have been obvious to a person of ordinary skill in the art, however to modify the apparatus of Tanii so that the buckets had a greater width than the cylindrical wall so that they were able to scoop and hold more solid materials to increase production of separating the solids from the liquids in the mixture.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tanii in view of Nordhus (4915826).

Referring to claim 23. Tanii discloses the invention as described above in detail.

Tanii does not disclose the frame having transport wheels. Nordhus discloses a "Grain cleaner" as claimed. See Figs. 1-3 and respective portions of the specification. Nordhus further discloses that the cleaner (10) comprises framework (12) having forward support legs (14), rear support legs (16) and that the rear support legs are provided with wheels (18) for towing. (See Col. 2 l. 27-33). It would have been obvious to a person of ordinary skill in the art to modify the apparatus of Tanii to include wheels on the framework as taught by Nordhus so that the apparatus could be portable and moved easily from one area to another.

Allowable Subject Matter

Claims 4-5,10,17,19-23,28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 5082533 Tanii discloses a "Concrete aggregate collecting apparatus" comprising a rotary tank, overflow transfer tank, trommel tank, driving means, screw conveyor, hopper, discharge chutes and a supply pipe.

U.S. Patent No. 4035288 Gibert discloses a " Fluidized bed seed separator" comprising multiple paddle wheels, drive arrangements, a motor speed reducer. Gibert additionally discloses that the paddle wheels can be rotated at variable speeds.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terrell H. Matthews whose telephone number is (571) 272-5929. The examiner can normally be reached on M-F 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on (571) 272-6951. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

THM


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